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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,322	08/17/2001	James P. Beltzer	DYX-018.1 US	5654
26161	7590	02/09/2005	EXAMINER	
FISH & RICHARDSON PC			CHISM, BILLY D	
225 FRANKLIN ST				
BOSTON, MA 02110			ART UNIT	PAPER NUMBER
			1654	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/932,322	BELTZER ET AL.	
	<b>Examiner</b> B. Dell Chism	<b>Art Unit</b> 1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 08 November 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-12,24-35 and 39-56 is/are pending in the application.
- 4a) Of the above claim(s) 1-8,13,24-38,41,50 and 53-56 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9-12 and 14 is/are rejected.
- 7) Claim(s) 9,39,40,42-49,51 and 52 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/09/04; 05/08/03; 01/06/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Applicant's election with traverse of Group II, claims 9-10, in the reply filed on 08 November 2004 is acknowledged. The traversal is on the ground(s) that the inventive groups shared similar or same classifications, and that some groups at least partially overlapped. This is not found persuasive in part and is persuasive in part because although the inventive groups for the multiplicity of structurally and functionally different amino acid sequences are within the same classification does not remedy the fact that the products of the different inventive groups require individual searches that do not necessarily, if at all, include any aspects of searches for the other inventive groups. For that reason, the search is burdensome. However, Applicants argument that there is some overlap between the elected invention and aspects of other inventive groups was found persuasive. Thus, claims 11, 12, 14, 39-40, 42-49 and 51-52 are joined in part with the elected invention of Group II, claims 9-10, only in so far as the claims pertain to the elected species, i.e., SEQ ID NO: 163. Applicants are reminded that along with the restriction, an election of species was also requested. Applicants complied with the election of species and elected the species SEQ ID NO: 163. In accordance with Markush practice, a search of the Markush-type claim was extended for claims 9-10. The MPEP 803.02 states should no prior art be found that anticipates or renders obvious the elected species, the search of the Markush-type claim will be extended. If prior art is then found that anticipates or renders obvious the Markush-type claim with respect to a non-elected species, the Markush-type claim shall be rejected and claims to the non-elected species held withdrawn from further consideration. *The prior art search, however, will not be extended unnecessarily to cover all non-elected species.* In the instant Application, a search of the Markush-group was extended. Those Markush claims not

drawn to the elected invention are held withdrawn from further consideration as being drawn to non-elected species.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 9-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Sauge-Merle *et al.* (European Journal of Biochemistry, 1999, Vol. 266, pages 62-69). Sauge-Merle *et al.* teaches sequences that read on the sequence formulae of SEQ ID NO: 10. For example, see page Figure 1, page 64, for the amino acid sequence of *A. thaliana*.

4. Claims 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Victoria *et al.* (US 6,207,160 B1). Victoria *et al.* teaches sequences and subsequences of the instantly claimed generic formulae SEQ ID NO: 10. For example, in Table 1, column 16, Victoria *et al.* teaches SEQ ID NOS: 27 and 32-35.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 11-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 12 are rejected for the indefinite recitation of different sequences for SEQ ID NO: 3 in each claim. Claim 12 appears to have one more X residue assigned between the cysteine residues, thus, it is unclear as which SEQ ID NO: 3 is intended.

Claim 14 is rejected for the indefinite recitation of a "J" residue SEQ ID NO: 164.

#### *Claim Objections*

7. Claims 9, 39-40, 42-49 and 51-52 are objected to because of the following informalities:  
(a) claim 9 is objected to for spelling the term formula as "formulae", however, the term is spelled "formula" through out the remaining claims; (b) claims 39-40, 42-49 and 51-52 are objected to for depending from rejected claims. Appropriate correction is required.

#### *Conclusion*

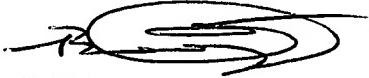
8. The elected species of (a) SEQ ID NO: 163, (b) the general formula H in the context of claim 9, and (c) the general formula A of claim 11 in the context of claim 11, are free of the prior art. Claims 1-8, 13, 24-38, 41, 50 and 53-56 are withdrawn from consideration as being drawn to non-elected subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Dell Chism, whose telephone number is (571) 272-0962. The examiner can normally be reached on M-F 08:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell, PhD can be reached on (571) 272-0974.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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B. Dell Chism  
**PATENT EXAMINER**